[Music]

Mark Masselli: This is Conversations on Health Care I'm Mark Masselli.

Margaret Flinter: I'm Margaret Flinter.

Mark Masselli: Well, Margaret eyes are on Washington as we wait and see what the final version of the federal budget is going to look like. The budget deal worked out last week to end the three day government shutdown included long term funding for CHIP the Children's Health Insurance Program. The nation's community health centers are still waiting for signs that their organizations will see renewed funding moving forward.

Margaret Flinter: Well, Mark I think it's really important to note that the 1400 community health center organizations in the United Sates are the essential primary care providers to some 27 million Americans and they're really on the frontlines of dealing with the opioid epidemic.

Mark Masselli: The Trump Administration declare the opioid epidemic a national emergency, but now they are talking about reducing the budget for the so called Drug Czars Office by 95%. Opioid overdose is now the leading the cause of accidental deaths in America, 64,000 in 2016 alone.

Margaret Flinter: The experts predict that the numbers for 2017 are most certainly going to be higher. That brings us to our guest today, we are going to revisit our interview with Dr. John Kelly an addiction medicine expert at Harvard Medical School who also was the founder of the Recovery Research Institute. He's been studying best practices for long term substance use disorder and treatment.

Mark Masselli: We're looking forward to that conversation along with Lori Robertson who will stop by, she's the managing editor of FactCheck.org. No matter what the topic you can hear all of our shows by going to chcradio.com.

Margaret Flinter: As always if you have comments please email us at chcradio@chc1.com or find us on Facebook or Twitter we really do love to hear from you.

Mark Masselli: We'll get to our interview with Dr. John Kelly in just a moment.

Margaret Flinter: First here is our producer Marianne O'Hare with this week's headline news.

[Music]

Marianne O'Hare: I'm Marianne O'Hare with these health care headlines. Comings and goings in health policy world, the Director of the Centers for Disease Control and

Prevention has resigned. Dr. Brenda Fitzgerald the former Health Commissioner for the state of Georgia was found to have purchased stocks in several tobacco companies after assuming the home of the CDC. In spite of having made public comments promising to work on curtailing tobacco consumption. An investigation by the publication Politico found that after being told by HHS attorneys to divest a number of her stock holdings and things like large pharmaceutical companies and other tobacco entities as well as large food companies, she went on to purchase stocks in Japan tobacco a large exporter of tobacco products into the US. While not illegal it does present a conflict of interest, according the Matthew Myers President of the Campaign for Tobacco-Free Kids her resignation was immediate.

The new director of the Department of Health and Human Services has been sworn in Alex Azar former president of pharmaceutical giant Eli Lilly. The president promising Azar will, quote "Bring drug prices way down." Three heavy hitters muscling into health care in a big announcement this week though lacking in specific details. Amazon's Jeff Bezos, Berkshire Hathaway's Warren Buffett and JP Morgan's Jamie Dimon announcing they formed a consortium whose goal is to disrupt health care specifically the cost. The announcement came in the form of a press release suggesting that this disruption would be tech based and would only be used to provide health services for their specific company employees for now. Effort such as company wellness programs and cost sharing initiatives have not move a needle on health care cost, in fact study after study shows they really don't work. The American government provides health care for more than employers do through Medicare, Medicaid and veterans programs. Those entities have not managed either to significantly reduce health care cost. I'm Marianne O'Hare with these health care headlines.

[Music]

Mark Masselli: We're speaking today with Dr. John F. Kelly founder and director of the Recovery Research institute at Massachusetts General Hospital and Associate Professor of Psychiatry at Harvard Medical School. Dr. Kelly is Associate Director of the Center for Addiction Medicine at Mass General. He is past president of the American Psychological Association and the Society of Addiction Psychology. He has served as consultant to the White House Office of the National Drug Control Policy. He earned his bachelor's of science from Tufts and his doctors of philosophy in clinical psychology from the University of San Diego. Dr. Kelly welcome to Conversations on Health Care.

Dr. John Kelly: Thank you, glad to be here.

Mark Masselli: Yeah, I don't think there's a community or a family that hasn't been touched or impacted by this drug addiction and overdose epidemic. I'm just wondering

if you could help put in perspective for our listeners the public health crisis we now find ourselves in, and why the nation's response seems to be falling so short?

Dr. John Kelly: About 33,000 people died from an opioid overdose in 2015 and this has gone up actually over the last couple of years as well. Of course this is occurring in the context of a broader public health crisis with addiction alcohol and other drug use disorders. We've seen this very stark and sharp increase in opioid, begun in part by the over prescribing of opioid medications which has led to increased availability, easy access ability. The nature of these drugs they are very potent, they are very seductive. What happens is because they are so seductive in human brain that they can seduce people into repetitive administration exposure, and then what's happened is that as people have been unable to obtain the prescription medications they've gone to cheaper availability of opioids in the form of heroin.

I think there is a sense of crisis but I think it's been way too small, it's really lacked the sense of urgency that's really needed. Certainly there is a sense of urgency, I go and speak to family groups, I'm on the board of a family organization to help family members who are affected by opioid addiction among their love ones. You really get the sense of urgency when you are attending these groups, parents, mothers who've lost their kids to opioid addiction. There is a sense of disconnection I think that the politicians are suffering from themselves that is a very apparent when you are living in the communities affected by these opioid overdoses.

Margaret Flinter: Well, Dr. Kelly you've said that the scientific understanding of addiction disorders has grown significantly in recent years. I think we'd all probably agree addiction is still a diagnosis that just carries with it enormous stigma. Can you help our listeners understand what is the clinical description understanding of addiction and how key are the roles of genomics as well neurophysiology in our current understanding of how addiction works?

Dr. John Kelly: Yes we've known for at least a couple of hundred years that addiction is disease that affects the brain. It's just that our understanding of clarity and understanding exactly the nature of the disease in the central nervous system in the brain has been clarified now because of the tools that we now have. With neuroimaging in particular that's giving us insights into just the impact of chronic substance exposure in the brain, as well as probably several decades now of genetic studies which help us understand about cause and vulnerability to this particular disease. Now, we understand addition as a disease of the brain that affects the neurocircuits of reward memory motivation, impulse control and judgment. These kinds of faculties in the brain are often radically impaired in moderate to severe substance use disorder. These neurocircuits when they're exposed chronically to substances they become changed as

the brain does its best to try and adapt to the presence of abnormally high level of a reinforcing property in the form of a substance a drug.

The brains attempts what we call neuroadaptation, creates a cascade of neurochemical changes which makes it very difficult to stop the substance use. This is what we see when we see withdraw symptoms, so the brain becomes accustomed to the presence of the drug, and when you take the drug away people experience very unpleasant affects from that absence of the drug. We can understand much more clearly through neuroimaging exactly the nature and the neurocircuitry involved, not just functionally but structurally. When we look at structural images things like magnetic resonance imaging, we can see structurally that the brain is also radically affected. The tissue structures in the brain are diminished and impaired. An autopsy for example, with chronic alcohol addiction the brains of people with chronic alcohol addiction way about one third less than the age and gender match counterparts.

In terms of cause, the genetic space we know that we are all — had certain vulnerabilities to certain diseases which are conferred by our genetic predisposition. Addiction turns out to be no different, people may choose to pick up a drink of alcohol or another drug and consume it, but the experience related to that initial exposure can be very different depending on the nature of our gene. For example, if you take a drug like alcohol to which a large proportion of the population is exposed, only about 15% will actually become addicted, and that is because of the experience that is modulated by their gene. Other people may kind of feel like they can just take it or leave it, and other people will actually have an aversive response, they'll say I don't like the way that makes me feel. That is modulated by their genetics, now of course that initial exposure leads to repetition.

When you have a substance like alcohol being socially sanctioned, people are more likely to repeat exposure to it and then for that particular vulnerable population they become hooked, that is the process. They don't choose to become addicted, and it's something that people when they're on the other side of that, when they cross that line into compulsive use, they find it very difficult to stop. It's critically important that people understand that there is this genetic influence on addiction which changes the brain, we're much clearer on both of those things now.

Mark Masselli: Dr. Kelly at Harvard you've brought science to the understanding of what yields good clinical outcomes. You've said that with addiction treatment and substance abuse disorders the pathways aren't always clear and that from most addiction disorders relapse is very much part of the equation and that it takes multiple attempts for most people to achieve sobriety. I'm wondering if you could address this aspect of addiction medicine that relapse is almost a certainty.

Dr. John Kelly: Well when you think about it trying to change any behavior is hard, right. I mean people make resolutions all the time to engaging, just going down the gym or changing their diet. How hard is that for people to actually maintain, usually people start off pretty well, but they tend to fade quickly, so these are people with generally healthy brains. Now imagine that compounded with someone who has actually brain deficits, the impairments in the brain that make it even more difficult to maintain that kind of goal directed choice. You're right, people don't snap their fingers one day wake up and say I want to be in recovery, I want to stop all this and then jump on the water wagon as it were, rather it is a gradual process of change where people start to entertain the idea and realize that they may have a problem with compulsive use and they can't stop that. It becomes important for people understand what it takes to get and stay in recovery, and it takes a lot of concerted consistent effort.

We know from these studies that after the onset of addiction takes about four to five years before people actually starts seeking help. It's actually related to this issue of stigma that makes people disincline to actually talk about it, acknowledge it and go seek help for it. When people start to seek help, it takes about eight years on average to get one year of full sustain remission. The good news is that people are making a lot of progress during that eight year period on their way to get one year of full sustain remission, so someone might get three months of abstinence and have a replace, might get six months have a relapse. Most of those days are actually abstinence days, but to get that one year continuous abstinence takes about eight years on average.

After someone achieves one year of full sustain remission it takes on average about four to five years of sustained remission before the risk of relapse in the following year drops below 15%. To be no more likely than anybody else in the general population to meet criteria for substance use disorder if you've already had it takes about four to five years of continuous remission. This is why we have placed much more emphasis in more recent times on chronic recovery management, so providing ongoing, monitoring and management of people with substance use disorder in the same way that we would address hypertension or diabetes other kinds of chronic medical conditions. We're now starting to address this in behavioral health as well in a more long term form.

Margaret Flinter: Dr. Kelly you've launched the research recovery institute at Mass General to become the go-to resource for stakeholder seeking the best science in addition medicine. On the frontlines primary care providers feel under siege somewhat and under-resourced and overwhelmed as they attempt to deal with the opioid crisis within their patient populations. We've use strategies like Project ECHO to bring training information education to providers across the country focused on how to correctly assess and managed chronic pain but also how to treat opioid addiction using medication assisted treatment. How are you sharing your best practices from the research recovery institute with stakeholders around the country?

Dr. John Kelly: Well, we've created a website at RecoveryAnswers.org that people can go to, to access the most current up-to-date information on what we know from a scientific perspective about effective implementation programs. A research has been done in a field regarding new innovations in clinical care. We also have our social media channels is one way that we communicate now to about a 100,000 people around the country. We also publishing monthly free recovery bulletin which disseminates this kind of information on a monthly basis using synthesize, contextualize summaries of the current scientific literature. Those are some of the ways that we have tried to get the latest signs out on opioid addiction treatment as well as ongoing issues Methamnetamine and alcohol and other disorders.

Mark Masselli: We're speaking today with Dr. John F. Kelly Founder and Director of the Recovery Research Institute at Massachusetts General Hospital and Professor of Psychiatry at Harvard Medical School. Dr. Kelly we've had a number of mental health and addiction advocates in our show including Obama White House Drug Czar Mike Botticelli whom address the critical need for more resources to confront the opioid epidemic. Wondering from a public policy initiative and addiction focus where do you see limited resources been best invested?

Dr. John Kelly: This has been the top public health problem for a long time. It's just that we have seen this opioid crisis now kind of hit everybody's radar screen. This is in context of an endemic public health problem. I think what we need to do is training our clinical work force to address the number one public health problem, so educating our clinical workforce would be one strong policy initiative that needs to be implemented, how do we train best train nurses and physicians other clinicians who are coming into contact with people historically have not been screened for these high volume high burden diseases because these disorders do affect the efficacy and effectiveness of whatever else we try to do in clinical care. We started to do that with making some in rows but we have to move more quickly I think.

Also on the other side, so the population overall in terms of education, educating young people do a better job in schools about educating young people about the dangers of substances and what it can do to their health. We would not allow this kind of thing to happen in many other kinds of health that we've allowed to happen with this current opioid crisis. These disorders tend to onset in late adolescence and young adulthood, and we do a poor job o really targeting when it's most likely to onset. If this was cancer we'd be spending a lot more money to making sure that we prevent onset, historically what we've done in the addiction field we would say to people go away and come back when you are ready, and of course that's at the stage four level of addiction, this is not good enough.

The other thing is that we need more effective and smarter ways of treating and keeping people in remission. We had a very short sighted acute care approach to a chronic illness, we need to target much more effectively the true nature of this disease which tends to be a chronic disease that is susceptible to relax for many years. We need to do a better job of supporting people for over a five year period, doesn't have to be intensive treatment, but it needs to be extensive treatment. Much like we would treat other kinds of chronic diseases. We need to support mutual health groups, recovery community centers, recovery support services and educational settings like recovery high schools, police recovery programs which are shown to be highly cost effective so that we can have intensive, more expensive intensive treatment for these conditions to stabilize people but to enable and to sustain remission over the long term and build lives worth living we need to support them in maintaining that remission overtime.

Margaret Flinter: We've been speaking today with Dr. John F. Kelly Founder and Director of the Recovery Research Institute at Massachusetts General Hospital. You can learn more about the Recovery Research Institute at Mass General by going to RecoveryAnswers.org. Dr. Kelly thank you so much for your work and for joining us on Conversations on Health Care today.

Dr. John Kelly: Thank you so much for having me I appreciate it.

[Music]

Mark Masselli: At Conversations on Health Care, we want our audience to be truly in the know when it comes to the facts about health care reform and policy. Lori Robertson is an award-winning journalist and Managing Editor of FactCheck.org, a non-partisan, nonprofit consumer advocate for voters that aim to reduce the level of deception in U.S. politics. Lori, what have you got for us this week?

Lori Robertson: The Federal Centers for Medicare and Medicaid Services issued a letter to state Medicaid programs in January providing guidance on why of a proposals that would impose work requirements for Medicaid. By indicating that the administration was open to such proposals from the states CMS was reversing course from previous administrations but haven't approved such waivers. Medicaid is the state federal program that provides health care coverage to low income individuals including adult, children, the elderly and people with disabilities. So far one waiver from Kentucky has been approved and nine other state waivers on work requirements have been submitted. Some Medicaid enrollees would likely be exempt from such requirements including the elderly and disabled. What do we know about the non-disabled, non-elderly adult population in Medicaid?

There were 24.6 million non-disabled, non-elderly adults with Medicaid coverage in 2016. 42% of them worked full-time according to the Kiser Family Foundations analysis

of data from the current population survey. Another 18% works part-time. Among the rest 14% are not working due to illness or disability, 12% are caregivers to family members, 6% are attending school and the remaining 7% are not working due to another reason. The not working for other reason category includes those who are retired and those who can't find work among other reasons. Kentucky's waiver program would apply to both expansion adults, those who gained coverage under the affordable care act expansion as well as traditional adults who had qualified previously. The work requirement is 80 hours per month, an exemptions to that requirement would include those age 65 and older, the medically frail or disabled, students and those providing care giving for a relative. Work activities in addition to employment would include job search, job training, volunteer service, education and drug treatment. The federal guidance says states must evaluate the impact of these demonstration projects. That's my fact check for this week, I'm Lori Robertson Managing Editor of FactCheck.org.

Margaret Flinter: FactCheck.org is committed to factual accuracy from the country's major political players and is a project of the Annenberg Public Policy Center at the University of Pennsylvania. If you have a fact that you'd like checked, email us at CHCradio.com we'll have FactCheck.org's, Lori Robertson, check it out for you, here on Conversations on Healthcare.

[Music]

Margaret Flinter: Each week Conversations highlights a bright idea about how to make wellness a part of our communities and to everyday lives. Tel Aviv Computer Scientist and developer Oded Ben Dov has been coding since he was six years old and he's always been interested in hacking systems to make them better. When this young entrepreneur unveiled a hands-free gaming system on Israeli TV local quadriplegic in the viewing audience took notice. The former Israeli naval officer contacted Ben Dov and urged him to think about adapting this hands-free gaming system to help quadriplegics interact with their smart phones by using simple head movements.

Oded Ben Dov: The guy in the call said hello my name is Giora [ph] I can't move my hands or legs, could you make me a smart phone I could use. That really caught my ear, caught my heart, it was a chance to apply all my tech knowledge towards greater good.

Mark Masselli: The two have partnered together on the project deciding to call the device, Sesame Phone as in Open Sesame.

Oded Ben Dov: Someone could opt for big head movement or very small head movement. You could use all extended voice commands or you could use a built-in Google dictation capabilities. We really try to make it as wide as possible for audience.

Margaret Flinter: Ben Dov says he has seen both children and adults formerly locked in by paralysis literally come alive.

Oded Ben Dov: It feels emotional, and every user use it differently. Someone immediately called his wife, children you know rushed to the most popular game and played there, our family being able to play what all other classmates are playing.

Margaret Flinter: The Sesame Phone now has hundreds of users around Israel and Ben Dov says, they have got bigger plans for developing this and other systems that are geared to assist the handicapped community.

Oded Ben Dov: We brought in our vision which is currently equality through technology. I feel a lot of technology that can really be life changing for some people but knowing necessarily it's working in bad direction. As the time goes by we see we're positioned well within the special need space.

Margaret Flinter: Sesame Phone's tagline is touch is overrated. Sesame Phone a simply devised hands-free interface that allows the paralyzed and physically handicap to interact with their world through their smart phones allowing them a new level of independence, now that's a bright idea.

[Music]

Margaret Flinter: This is Conversations on Health Care I'm Margaret Flinter.

Mark Masselli: I'm Mark Masselli, peace and health.

Conversations on Health Care broadcast from WESU at Wesleyan University, streaming live at www.wesufm.org and brought to you by the Community Health Center.